



PATENT
ATTORNEY DOCKET: 58777.000016

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Number : 10/827,341 Confirmation No.: 2595
Applicant : Kazuwa NAKAO
Filed : April 20, 2004
Title : THERAPEUTIC AGENTS FOR ACHONDROPLASIA
TC/Art Unit : 1615
Examiner: : Unassigned

Docket No. : 58777.000016
Customer No. : 21967

Mail Stop Amendment

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. §§ 1.97 and 1.98, and in compliance with the duty of disclosure set forth in 37 C.F.R. § 1.56, applicants are submitting herewith copies of the references listed on the attached Form PTO-SB/08A (modified) for consideration and to be made of record herein by the U.S. Patent and Trademark Office in the above-captioned application.

The subject application is a Divisional of U.S. Application No. 10/218,109 (Atty. Docket No. 58777.000016), filed August 14, 2002. In accordance with 37 C.F.R. § 1.98(d), patent documents and published articles which were cited in the prior application are listed on the accompanying Form PTO-SB/08A, but copies of these documents are not enclosed as they were provided in the prior application. However, copies will be forwarded at the Examiner's request.

Consideration of the foregoing plus the prompt return of a copy of the enclosed Form SB/08A with the Examiner's initials in the left column in accordance with MPEP 609 are respectfully requested.

In accordance with 37 C.F.R. § 1.97(b), this Information Disclosure Statement is believed to be submitted prior to issuance of a first Office Action and within three months of the

filings date of the application. Therefore, it is respectfully submitted that no fee is required for consideration of this information. However, in the event any fee is deemed necessary, the Commissioner is authorized to charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

HUNTON & WILLIAMS LLP

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JLP/sdw

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PTO/SB/08A (10/01) (modified)

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO, TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application Number

10/827,341

Filing Date

April 20, 2004

First Named Inventor

Kazuwa NAKAO

Art Unit

1615

Examiner Name

Unassigned

Sheet

1

of

3

Attorney Docket Number

58777.000016

U.S. PATENT DOCUMENTS

*Examiner Initials	Cite No.	DOCUMENT NUMBER Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1.	US- 6369295	04-09-2002	Cheah et al.	

FOREIGN PATENT DOCUMENTS

*Examiner Initials	Cite No.	FOREIGN PATENT DOCUMENT		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	TRANSLATION	
		Country Code:	Number - Kind Code (if known)				YES	NO
2.		WO	91/16342	10-31-1991	Matsuo		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.		JP	04-074198 (Abstract)	03-09-1992	Toshiyuki et al.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.		JP	04-120094 (Abstract)	04-21-1992	Toshiyuki et al.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.		JP	04-120095 (Abstract)	04-21-1992	Toshiyuki et al.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.		JP	04-139199 (Abstract)	05-13-1992	Toshiyuki et al.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.		JP	06-009688 (Abstract)	01-18-1994	Masaharu et al.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
8.		WO	02/074234	09-26-2002	Golembo et al.		<input checked="" type="checkbox"/>	<input type="checkbox"/>

NON-PATENT LITERATURE DOCUMENTS

*Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	TRANSLATION	
			YES	NO
9.		CHINKERS et al., "Signal transduction by guanylyl cyclases," Annu. Rev. Biochem. 60 , pp. 553-575 (1991)	<input type="checkbox"/>	<input type="checkbox"/>
10.		CHUSHO et al., "Dwarfism and early death in mice lacking C-type natriuretic peptide," Proc. Natl. Acad. Sci. U.S.A. 98 , pp. 4016-4021 (2001)	<input type="checkbox"/>	<input type="checkbox"/>
11.		HAGIWARA et al., "Autocrine regulation of rat chondrocyte proliferation by natriuretic peptide C and its receptor, natriuretic peptide receptor-B," J. Biol. Chem. 269 , pp. 10729-10733 (1994)	<input type="checkbox"/>	<input type="checkbox"/>
12.		INOUE et al., "Reciprocal regulation by cyclic nucleotides of the differentiation of rat osteoblast-like cells and mineralization of nodules," Biochem. Biophys. Res. Commun. 215 , pp. 1104-1110 (1995)	<input type="checkbox"/>	<input type="checkbox"/>

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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449A/PTO				Application Number	10/827,341
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Filing Date	April 20, 2004
				First Named Inventor	Kazuwa NAKAO
				Art Unit	1615
				Examiner Name	Unassigned
Sheet	2	of	3	Attorney Docket Number	58777.000016

NON-PATENT LITERATURE DOCUMENTS

	13.	KOJIMA et al., "Cloning and sequence analysis of a cDNA encoding a precursor for rat C-type natriuretic peptide (CNP)," FEBS Lett. 276 , pp. 209-213 (1990)	<input type="checkbox"/>	<input type="checkbox"/>
	14.	KOLLER et al., "Selective activation of the B natriuretic peptide receptor by C-type natriuretic peptide (CNP)," Science 252 , pp. 120-123 (1991)	<input type="checkbox"/>	<input type="checkbox"/>
	15.	KOMATSU et al., "C-type natriuretic peptide (CNP) in rats and humans," Endocrinology 129 , pp. 1104-1106 (1991)	<input type="checkbox"/>	<input type="checkbox"/>
	16.	KOMATSU et al., "Regulation of endothelial production of C-type natriuretic peptide in coculture with vascular smooth muscle cells," Circ. Res. 78 , pp. 606-614 (1996)	<input type="checkbox"/>	<input type="checkbox"/>
	17.	MERICQ et al., "Regulation of fetal rat bone growth by C-type natriuretic peptide and cGMP," Pediatr. Res. 47 , pp. 189-193 (2000)	<input type="checkbox"/>	<input type="checkbox"/>
	18.	METSÄRANTA et al., "Developmental expression of a type II collagen/β-galactosidase fusion gene in transgenic mice," Dev. Dyn. 204 , pp. 202-210 (1995)	<input type="checkbox"/>	<input type="checkbox"/>
	19.	MINAMINO et al., "N-terminally extended form of C-type natriuretic peptide (CNP-53) identified in porcine brain," Biochem. Biophys. Res. Commun. 170 , pp. 973-979 (1990)	<input type="checkbox"/>	<input type="checkbox"/>
	20.	MUKOYAMA et al., "Brain natriuretic peptide as a novel cardiac hormone in humans," J. Clin. Invest. 87 , pp. 1402-1412 (1991)	<input type="checkbox"/>	<input type="checkbox"/>
	21.	NASKI et al., "Repression of hedgehog signaling and BMP4 expression in growth plate cartilage by fibroblast growth factor receptor 3," Development 125 , pp. 4977-4988 (1998)	<input type="checkbox"/>	<input type="checkbox"/>
	22.	OGAWA et al., "Molecular cloning of the complementary DNA and gene that encode mouse brain natriuretic peptide and generation of transgenic mice that overexpress the brain natriuretic peptide gene," J. Clin. Invest. 93 , pp. 1911-1921 (1994)	<input type="checkbox"/>	<input type="checkbox"/>
	23.	ROSENZWEIG et al., "Atrial natriuretic factor and related peptide hormones," Annu. Rev. Biochem. 60 , pp. 229-255 (1991)	<input type="checkbox"/>	<input type="checkbox"/>
	24.	ROUSSEAU et al., "Mutations in the gene encoding fibroblast growth factor receptor-3 in achondroplasia," Nature 371 , pp. 252-254 (1994)	<input type="checkbox"/>	<input type="checkbox"/>

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Sheet	3	of	3	Attorney Docket Number	58777.000016		
NON-PATENT LITERATURE DOCUMENTS							
25.	SHIANG et al., "Mutations in the transmembrane domain of FGFR3 cause the most common genetic form of dwarfism, achondroplasia," <i>Cell</i> 78 , pp. 335-342 (1994)					<input type="checkbox"/>	<input type="checkbox"/>
26.	SHUKUNAMI et al., "Cellular hypertrophy and calcification of embryonal carcinoma-derived chondrogenic cell line ATDC5 in vitro," <i>J. Bone. Miner. Res.</i> 12 , pp. 1174-1188 (1997)					<input type="checkbox"/>	<input type="checkbox"/>
27.	STAMOYANNOU et al., "Growth and growth hormone therapy in children with achondroplasia: a two-year experience," <i>American Journal Of Medical Genetics</i> 72 , pp. 71-76 (1997)					<input type="checkbox"/>	<input type="checkbox"/>
28.	SUDA et al., "C-type natriuretic peptide as an autocrine/paracrine regulator of osteoblast," <i>Biochem. Biophys. Res. Commun.</i> 223 , pp. 1-6 (1996)					<input type="checkbox"/>	<input type="checkbox"/>
29.	SUDA, "Skeletal overgrowth in transgenic mice that overexpress brain natriuretic peptide," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 95 , pp. 2337-2342 (1998)					<input type="checkbox"/>	<input type="checkbox"/>
30.	SUDOH et al., "A C-type natriuretic peptide (NP): new member of natriuretic peptide family identified porcine brain," <i>Biochem., Biophys. Res. Commun.</i> 168 , pp. 863-870 (1990)					<input type="checkbox"/>	<input type="checkbox"/>
31.	TANAKA et al., "Effect of growth hormone therapy in children with achondroplasia: growth pattern, hypothalamic-pituitary function, and genotype," <i>European Journal of Endocrinology</i> 138 , pp. 275-280 (1998)					<input type="checkbox"/>	<input type="checkbox"/>
32.	YASODA et al., "Natriuretic peptide regulation of endochondral ossification," <i>J. Biol. Chem.</i> 273 , pp. 11695-11700 (1998)					<input type="checkbox"/>	<input type="checkbox"/>
33.	YASODA et al., Abstract for the 72th Congress of the Japan Endocrine Society 74 , p. 87 (1999)					<input type="checkbox"/>	<input type="checkbox"/>
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